



PRELIMINARY DETERMINATION
ON PERMIT APPLICATION

Date of Mailing: 3/20/2009

Name of Applicant: Ken Griffith Excavating

Source: Portable Crushing Facility

Proposed Action: The Department of Environmental Quality (Department) proposes to issue a permit, with conditions, to the above-named applicant. The application was assigned Permit Application Number 3417-01.

Proposed Conditions: See attached.

Public Comment: Any member of the public desiring to comment must submit such comments in writing to the Air Resources Management Bureau (Bureau) of the Department at the above address. Comments may address the Department's analysis and determination, or the information submitted in the application. In order to be considered, comments on this Preliminary Determination are due by April 20, 2009. Copies of the application and the Department's analysis may be inspected at the Bureau's office in Helena. For more information, you may contact the Department.

Departmental Action: The Department intends to make a decision on the application after expiration of the Public Comment period described above. A copy of the decision may be obtained at the above address. The permit shall become final on the date stated in the Department's Decision on this permit, unless an appeal is filed with the Board of Environmental Review (Board).

Procedures for Appeal: Any person jointly or severally adversely affected by the final action may request a hearing before the Board. Any appeal must be filed by the date stated in the Department's Decision on this permit. The request for a hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for a hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, MT 59620.

For the Department,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-9741

Shawn Juers
Environmental Engineer
Air Resources Management Bureau
(406) 444-2049

VW: SJ
Enclosures

MONTANA AIR QUALITY PERMIT

Issued To: Ken Griffith Excavating
P.O. Box 1193
Baker, MT 59313

Permit #3417-01
Permit Modification Request Received: 2/19/2009
Preliminary Determination Issued: 3/20/2009
Department Decision Issued:
Permit Final:
AFS #777-3417

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Ken Griffith Excavating (Ken Griffith), pursuant to Sections 75-2-204 and 211, Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

Section I: Permitted Facilities

A. Plant Location

Ken Griffith operates a portable crushing facility initially located in Section 13, Township 8 North, Range 58 East, in Fallon County, Montana. Permit #3417-01 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum will be required for locations in or within 10 km of certain PM₁₀ nonattainment areas.

B. Current Permit Action

On February 19, 2009, the Department received a complete MAQP Application to add two 400 horsepower (hp) diesel engines/generators. The current permit action updates the permit to include that equipment and to reflect the current permit language used by the Department.

Section II: Limitations and Conditions

A. Operational Limitations and Conditions

1. Ken Griffith shall not cause or authorize to be discharged into the atmosphere from any Standards of Performance for New Stationary Sources (NSPS)-affected crusher, any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO).
2. Ken Griffith shall not cause or authorize to be discharged into the atmosphere from any other NSPS-affected equipment, such as screens or conveyor transfers, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO).
3. Ken Griffith shall not cause or authorize to be discharged into the atmosphere,

from any non-NSPS affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308 and ARM 17.8.752).

4. Water and water spray bars shall be available on site at all times and operated as necessary to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.752).
5. Ken Griffith shall not cause or authorize to be discharged into the atmosphere from any street, road, or parking lot any visible fugitive emissions that exhibit an opacity of 20% or greater (ARM 17.8.308 and ARM 17.8.752).
6. Ken Griffith shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749).
7. Crushing production from the facility shall be limited to 4,090,920 tons during any rolling 12-month time period (ARM 17.8.749).
8. Ken Griffith shall not operate more than one crusher at any given time and the maximum rated design capacity of the crusher shall not exceed 467 TPH (ARM 17.8.749).
9. Ken Griffith shall not operate more than two diesel-powered engines/generators and the maximum rated design capacity of each engine/generator shall not exceed 400 hp (ARM 17.8.749).
10. The diesel powered engines/generators shall be limited to 6,450 hours of operation each during any rolling 12 month time period (ARM 17.8.749 and ARM 17.8.1204).
11. If the permitted equipment is used in conjunction with any other equipment owned or operated by Ken Griffith, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons of emissions during any rolling 12-month time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
12. Ken Griffith shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
13. Ken Griffith shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, subpart IIII, *Standards of Performance for stationary Compression Ignition Internal Combustion Engines* and 40 CFR 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, for any applicable diesel engine (ARM 17.8.340; 40 CFR 60, Subpart IIII; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

B. Testing Requirements

1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures as specified in 40 CFR 60.675 must be performed on all NSPS affected equipment to demonstrate compliance with the emission limitations contained in Section II.A.1 and II.A.2 (ARM 17.8.340 and 40 CFR 60, General Provisions and Subpart OOO).
2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this portable crushing/screening plant is moved to another location, an Intent to Transfer Form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer Form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.765).
2. Ken Griffith shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. All records compiled in accordance with this permit shall be maintained by Ken Griffith as a permanent business record for at least 5 years following the date of the measurement, must be submitted to the Department upon request, and must be available at the plant site for inspection by the Department (ARM 17.8.749).
3. Ken Griffith shall supply the Department with annual production information for all emission points, as required by the Department in the annual Emission Inventory request. The request will include, but is not limited to, all sources of emissions identified in the most recent emission inventory report and sources identified in Section I.A of the Permit Analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in units as required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

4. Ken Griffith shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include ***the addition of a new emissions unit***, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to start-up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).
5. Ken Griffith shall document, by month, the amount of total crushing production for the facility. By the 25th day of each month Ken Griffith shall calculate the

total amount of total combined crushing production for the facility during the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.8. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

6. Ken Griffith shall document, by month, the hours of operation of each diesel-powered engine/generator. By the 25th day of each month Ken Griffith shall calculate the total amount of hours of operation of each engine/generator. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.10. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
7. Ken Griffith shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204 (3)(b). The annual certification shall comply with requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emission inventory information.

Section III: General Conditions

- A. Inspection - Ken Griffith shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver - The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Ken Griffith fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving Ken Griffith of the responsibility for complying with any applicable federal or Montana statute, rule or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement - Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401 *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection - As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the

location of the permitted source.

- G. Permit Fee - Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Ken Griffith may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit - Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. Ken Griffith shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas having a Department approved permitting program or areas considered tribal lands.

PERMIT ANALYSIS
Ken Griffith Excavating
MAQP #3417-01

I. Introduction/Process Description

A. Permitted Equipment

Ken Griffith Excavating (Ken Griffith) owns and operates a portable crushing facility consisting of a portable crusher (up to 467 tons per hour (TPH)), two 400-horsepower (hp) diesel generators, and 4 conveyors.

Ken Griffith is initially located in the Section 13, Township 8 North, Range 58 East, in Fallon County, Montana. Montana Air Quality Permit (MAQP) #3417-01 will apply to the source while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* Ken Griffith will be required to obtain an addendum to this air quality permit to operate at locations in or within 10 km of certain PM₁₀ nonattainment areas.

B. Source Description

Ken Griffith uses this crushing plant and associated equipment to crush scoria rock for use as road material. For a typical operational setup, materials are loaded into the crushing plant by a loader, transferred by conveyor, and passed through the crusher. Materials are sent to stockpile for sale and use as road material.

C. Permit History:

On October 13, 2005, the Department received a complete MAQP application from Ken Griffith to operate a 467 TPH impact crusher and four conveyors. MAQP #3417-00 became final on December 7, 2005.

D. Current Permit Action

On February 9, 2009, the Department received a complete MAQP Application from Ken Griffith to add two 400 hp diesel engines/generators. The current permit action updates the permit to include that equipment and to reflect the current permit language used by the Department. **MAQP #3417-01 replaces MAQP #3417-00.**

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 - General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This rule is a list of applicable definitions used in this subchapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Ken Griffith shall comply with all requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.

B. ARM 17.8, Subchapter 2 - Ambient Air Quality, including, but not limited to:

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
4. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
5. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
6. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
7. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Ken Griffith must comply with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 - Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter (PM). (2) Under this rule, Ken Griffith shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne PM.
3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere PM caused by the combustion of fuel in excess of the amount determined by this rule.
4. ARM 17.8.310 Particulate Matter, Industrial Processes. This rule requires that no person shall cause or allow to be discharged into the atmosphere PM in excess of the amount set forth in this section.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
7. ARM 17.8.340 Standards of Performance for New Stationary Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) 60, Standards of Performance for New Stationary Sources (NSPS). The owner or operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, NSPS, shall comply with the standards and provisions of 40 CFR Part 60.
 - a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below.
 - b. 40 CFR 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants. In order for a crushing plant to be subject to NSPS requirements, two specific criteria must be met. First, the crushing plant must meet the definition of an affected facility and, second, the equipment in question must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Ken Griffith, in obtaining a generalized permit for the crushing equipment, the 2002 Lippmann 42x48 Impact crusher is an NSPS-affected source because of the size and date of manufacture of the equipment.
 - c. 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE), indicates that NSPS requirements apply to owners or operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE is manufactured after April 1, 2006, and is not a fire pump engine. The diesel engine/generators were manufactured in 1978 and 1980 and therefore are not subject to this Subpart. However, since this permit is written in a de minimis-friendly manner, this regulation may apply to engines at the facility.
8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source

Categories. This rule requires that a source, as defined and applied in 40 CFR Part 63, comply with the requirements of 40 CFR Part 63.

- a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a National Emission Standard for Hazardous Air Pollutants (NESHAPs) Subpart as listed below:
- b. 40 CFR 63, Subpart ZZZZ – NESHAPs for Stationary Reciprocating Internal Combustion Engines (RICE). As an area source, the diesel RICE at Ken Griffith will be subject to this rule. However, although diesel RICE engines are an affected source, per 40 CFR 63.6590(b)(3) they do not have any requirements unless they are new or reconstructed after June 12, 2006. Any diesel RICE engine operated by Ken Griffith that is new or reconstructed after June 12, 2006, will be subject to this Maximum Available Control Technology (MACT) standard if the engine remains or will remain at the permitted location for more than 12 months, or a shorter period of time for an engine located at a seasonal source. A seasonal source remains at a single location on a permanent basis (at least 2 years) and operates 3 months or more each year. Since the permit is written in a de minimis-friendly manner, area source provisions of the MACT requirements may apply to facility engines.

D. ARM 17.8, Subchapter 5 - Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that Ken Griffith submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Ken Griffith submitted the required permit application fee for the current permit action.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an Open Burning Permit, issued by the Department. This operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

E. ARM 17.8, Subchapter 7 - Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule

requires a facility to obtain an air quality permit or permit modification to construct, modify, or use any asphalt plant, crusher, or screen that has the Potential to Emit (PTE) greater than 15 tons per year of any pollutant. Ken Griffith has a PTE greater than 15 tons per year of total PM and PM₁₀; therefore, an air quality permit is required.

3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit Program.
4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. Ken Griffith submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Ken Griffith submitted an affidavit of publication of public notice for the February 14, 2009, issue of the *Fallon County Times*, a newspaper of general circulation in the City of Baker in Fallon County, as proof of compliance with the public notice requirements.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that Best Available Control Technology (BACT) shall be utilized. The required BACT analysis is included in Section IV of this permit analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Ken Griffith of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.

11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of Ken Griffith, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of Intent to Transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Subchapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not a listed source and does not have a PTE greater than 250 tons per year (excluding fugitive emissions) of any air pollutant.

G. ARM 17.8, Subchapter 12 - Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:

- a. PTE > 100 tons/year of any pollutant.
- b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule.
- c. PTE > 70 tons/year of PM₁₀ in a serious PM₁₀ nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #3417-01 for the Ken Griffith facility, the following conclusions were made:

- a. The facility's PTE is less than 100 tons/year..
- b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
- c. This source is not located in a serious PM₁₀ nonattainment area.
- d. This facility is potentially subject to area source provisions of a current NESHAP standard (40 CFR 63, Subpart ZZZZ).
- e. This facility is currently subject to NSPS standards (40 CFR 60, Subpart A, General Provisions, and Subpart OOO, Non-Metallic Mineral Processing Plants).
- f. This source is not a Title IV affected source nor a solid waste combustion unit.
- g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that Ken Griffith will be a minor source of emissions as defined under Title V based on a requested federally enforceable permit limit. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, XXX will be required to obtain a Title V Operating Permit.

- h. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's PTE.
- i. In applying for an exemption under this section the owner or operator of the facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality

operating permit.

- ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. This rule requires that Ken Griffith shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204 (3)(b). The annual certification shall comply with requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emission inventory information.

III. Emission Inventory

W/ Operational Limit on engines/generators of 6,450 hrs each

| Source | PM | PM-10 | NOx | Tons/Year | CO | SOx |
|-----------------------------------|--------------|--------------|--------------|-------------|--------------|-------------|
| | | | | VOC | | |
| Lippman 4248LP Impact Crusher | 11.05 | 4.91 | | | | |
| 400 hp Cummins Generator | 2.84 | 2.84 | 39.99 | 3.23 | 8.64 | 2.71 |
| 400 hp Cat Generator | 2.84 | 2.84 | 39.99 | 3.23 | 8.64 | 2.71 |
| Transfer Operations (4 conveyors) | 18.41 | 6.75 | | | | |
| Pile Forming (1 pile formed) | 15.14 | 7.16 | | | | |
| Bulk Loading (2) | 15.14 | 7.16 | | | | |
| Total | 65.42 | 31.66 | 79.98 | 6.46 | 17.28 | 5.42 |

CRUSHERS - (SCC 3-050030-03, uncontrolled)**Lippman 4248LP Impact Crusher**

Process Rate: 467.0000 tons/hr
 Hours of operation: 8760.0000 hr/yr or 24 hr/day

PM Emissions (controlled):

Emission Factor: 0.0054 lbs/ton (AP-42 Table 11.19.2-2, 8/2004)
 Calculations: 0.0054 lbs/ton * 467 tons/hr = 2.522 lbs/hr
 2.522 lbs/hr * 8760 hr/yr * 0.0005 ton/lb = 11.046 tons/yr

PM-10 Emissions (controlled):

Emission Factor: 0.0024 lbs/ton (AP-42 Table 11.19.2-2, 8/2004)
 Calculations: 0.0024 lbs/ton * 467 tons/hr = 1.121 lbs/hr
 1.121 lbs/hr * 8760 hr/yr * 0.0005 ton/lb = 4.910 tons/yr

Material Transfer - (SCC 3-05-020-06, uncontrolled)**Material Transfer (3 transfers)**

Process Rate: 467.0000 tons/hr
 Number of Transfers: 3.0000 Transfers
 Hours of operation: 8760.0000 hr/yr or 24 hr/day

PM Emissions:

Emission Factor: 0.0030 lbs/ton (AP-42 Table 11.19.2-2, 8/2004)
 Calculations: 0.003 lbs/ton * 467 tons/hr * 3 Transfers = 4.203 lbs/hr
 4.203 lbs/hr * 8760 hr/yr * 0.0005 ton/lb = 18.409 tons/yr

PM-10 Emissions:

Emission Factor: 0.0011 lbs/ton (AP-42 Table 11.19.2-2, 8/2004)
 Calculations: 0.0011 lbs/ton * 467 tons/hr * 3 Transfers = 1.541 lbs/hr
 1.541 lbs/hr * 8760 hr/yr * 0.0005 ton/lb = 6.750 tons/yr

Pile Forming (1 Pile)

Process Rate: 467.0000 tons/hr
 Hours of operation: 8760.0000 hr/yr or 24 hr/day

PM Emissions:

$$E = k(0.0032) \left(\frac{U}{5} \right)^{1.3} \left(\frac{M}{2} \right)^{1.4} \text{ (pound [lb]/ton)}$$

where:

E = emission factor
 k = particle size multiplier (dimensionless)
 U = mean wind speed, meters per second (m/s) (miles per hour [mph])
 M = material moisture content (%)

k = 0.7400 for PM
 k = 0.3500 for PM10
 M = 1.5450 %
 U = 9.1000 MPH

average moisture content observed in mineral processing: AP-42 table 11.19.2-1 note b
 statewide average : <http://met-www.cit.cornell.edu/cod/wndspd98.html>

PM E = 0.0074 lbs/ton
 PM10 E = 0.0035 lbs/ton

PM Emissions:

Emission Factor: 0.0074 lbs/ton (AP 42 13.2.4, 11/06)
 Calculations: 0.0074 lbs/ton * 467 tons/hr = 3.456 lbs/hr
 3.456 lbs/hr * 8760 hr/yr * 0.0005 tons/lb = 15.137 tons/yr

PM-10 Emissions:

Emission Factor: 0.0035 lbs/ton (AP 42 13.2.4, 11/06)
 Calculations: 0.0035 lbs/ton * 467 tons/hr = 1.635 lbs/hr
 1.635 lbs/hr * 8760 hr/yr * 0.0005 tons/lb = 7.161 tons/yr

Bulk Loading (2)

Process Rate 467.0000 tons/hr

Generators - (SCC 2-02-001-02, 2-03-001-01)

1980 Cummins Marathon Model NTA 855

Rated hp: 400.0000 hp
6450.0000 hrs

PM Emissions - hP

Emissions Factor: 0.0022 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: $0.0022 \text{ lb/hP-hr} * 400 \text{ hP} = 0.880 \text{ lb/hr}$
 $0.88 \text{ lbs/hr} * 6450 \text{ hrs} * 0.0005 \text{ tons/lb} = \mathbf{2.838 \text{ tons/yr}}$

PM-10 Emissions assume all PM emissions are PM10 emissions (AP-42 Table 3.3-1, 10/1996)
0.880 lb/hr
2.838 tons/yr

NO_x

Emissions Factor: 0.0310 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: $0.031 \text{ lb/hP-hr} * 400 \text{ hP} = 12.400 \text{ lb/hr}$
 $12.4 \text{ lbs/hr} * 6450 \text{ hrs} * 0.0005 \text{ tons/lb} = \mathbf{39.990 \text{ tons/yr}}$

CO

Emissions Factor: 0.0067 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: $0.0067 \text{ lb/hP-hr} * 400 \text{ hP} = 2.680 \text{ lb/hr}$
 $2.68 \text{ lbs/hr} * 6450 \text{ hrs} * 0.0005 \text{ tons/lb} = \mathbf{8.643 \text{ tons/yr}}$

SO_x

Emissions Factor: 0.0021 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: $0.0021 \text{ lb/hP-hr} * 400 \text{ hP} = 0.840 \text{ lb/hr}$
 $0.84 \text{ lbs/hr} * 6450 \text{ hrs} * 0.0005 \text{ tons/lb} = \mathbf{2.709 \text{ tons/yr}}$

VOC

Emissions Factor: 0.0025 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: $0.0025 \text{ lb/hp-hr} * 400 \text{ hp} = 1.000 \text{ lb/hr}$
 $1 \text{ lb/hr} * 6450 \text{ hrs} * 0.0005 \text{ tons/lb} = \mathbf{3.225 \text{ tons/yr}}$

Total HAPs

Emissions Factor: 0.0037 lb/MMBTU (AP-42 Table 3.3-2, 10/1996)
Conversion Factor: 7000.0000 BTU/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: $7000 \text{ BTU/hp-hr} * 400 \text{ hp} * 0.0037 \text{ lb/MMBTU} * 10^{-6} \text{ BTU/MMBTU} = 0.010 \text{ lb/hr}$
 $0.01 \text{ lb/hr} * 6450 \text{ hr} * 0.0005 \text{ tons/lb} = \mathbf{0.032 \text{ ton/yr}}$

1978 Cat Model 3406A

Rated hp: 400.0000 hp
6450.0000 hrs

All Potential To Emit calculations will be the same as above. I.E. :

PM Emissions

Emissions Factor: 0.0022 lb/hp-hr (AP-42 Table 3.3-1, 10/1996)
Calculations: $0.0022 \text{ lb/hP-hr} * 400 \text{ hP} = 0.880 \text{ lb/hr}$
 $0.88 \text{ lbs/hr} * 6450 \text{ hrs} * 0.0005 \text{ tons/lb} = \mathbf{2.838 \text{ tons/yr}}$

IV. BACT Analysis

A BACT determination is required for any new or modified source. Ken Griffith shall install on any new or modified source the maximum air pollution control capability that is technologically practicable and economically feasible, except that BACT shall be used. The current permit action is to add the diesel engines/generators.

Generators – (Diesel Fired Engine)

Because of the limited amount of emissions produced by the diesel-fired engine and the lack of readily available and cost effective add-on controls, add-on controls would be cost prohibitive for the proposed diesel-fired engine. Therefore, the Department determined that proper operation and maintenance with no additional controls constitutes BACT for the diesel-fired engine in this case.

The control options required for the diesel-fired engine have controls and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

V. Existing Air Quality

Permit #3417-01 is issued for the operation of a portable aggregate screening facility to be initially located in Section 13, Township 8 North, Range 58 East, in Fallon County, Montana. This facility would be allowed to operate at any area designated as attainment or unclassified for all National Ambient Air Quality Standards (NAAQS); excluding those counties that have a Department approved permitting program, those areas considered Tribal Lands, or those areas in or within 10 km of certain PM₁₀ nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.* Ken Griffith will be required to obtain an addendum to this air quality permit to operate at locations in or within 10 km of certain PM₁₀ nonattainment areas.

VI. Air Quality Impacts

This permit is for a portable crushing plant to be located at various locations around Montana. This permit contains operational conditions and limitations that would protect air quality for this site and the surrounding area. Also, this facility is a portable source that would operate on an intermittent and temporary basis, so any effects to air quality will be minor and short-lived. Further, the amount of controlled particulate emissions generated by this project should not cause concentrations of PM₁₀ in the ambient air that exceed the set standard. In addition, this source is portable and any air quality impacts will be minimal.

VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

| YES | NO | |
|-----|----|---|
| | | 1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights? |
| | X | 2. Does the action result in either a permanent or indefinite physical occupation of private property? |
| | X | 3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property) |
| | X | 4. Does the action deprive the owner of all economically viable uses of the property? |
| | X | 5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)]. |
| | | 5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests? |
| | | 5b. Is the government requirement roughly proportional to the impact of the proposed use of the property? |
| | X | 6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action) |
| | X | 7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? |
| | X | 7a. Is the impact of government action direct, peculiar, and significant? |
| | X | 7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded? |
| | X | 7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question? |
| | X | Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas) |

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

VIII. Environmental Assessment

An Environmental Assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
1520 East Sixth Avenue
P.O. Box 200901
Helena, Montana 59620-0901
(406) 444-3490

DRAFT ENVIRONMENTAL ASSESSMENT (EA)

Issued For: Ken Griffith Industries, Inc.

P.O. Box 1116
4333 Tumwater Access Road
Port Angeles, WA 98362

Permit Number: 3417-01

Preliminary Determination Issued: 3/20/2009

Department Decision Issued:

Permit Final:

1. *Legal Description of Site:* Ken Griffith submitted an application to add diesel generators/engines to a portable crushing plant in Section 13, Township 8 North, Range 58 East, in Fallon County, Montana. Permit #3417-01 would apply while operating at any location in Montana, except within those areas having a Department-approved permitting program, those areas considered to be tribal lands, or those areas in or within 10 km of certain PM₁₀ nonattainment areas. An addendum to this air quality permit would be required if Ken Griffith intends to locate in or within 10 km of certain PM₁₀ nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.*
2. *Description of Project:* The permit applicant proposes the operation of two diesel generators. Currently on site is a portable crushing plant that consists of an impact crusher (up to 467 TPH) and associated equipment.
3. *Objectives of Project:* The object of the project would be to produce business and revenue for the company through the sale and use of crushed scoria. The issuance of Permit #3417-01 would allow Ken Griffith to operate the permitted equipment at various locations throughout Montana.
4. *Additional Project Site Information:* In many cases, this crushing operation may move to a general site location or open cut pit, which has been previously permitted through the Industrial and Energy Minerals Bureau (IEMB). If this were the case, additional information for the site would be found in the Mined Land Reclamation Permit for that specific site.
5. *Alternatives Considered:* In addition to the proposed action, the Department considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Ken Griffith demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

6. *A Listing of Mitigation, Stipulations, and Other Controls:* A listing of the enforceable permit conditions and a Permit Analysis, including a BACT analysis, would be contained in Permit #3417-01.
7. *Regulatory Effects on Private Property Rights:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and to demonstrate compliance with those requirements and would not unduly restrict private property rights.
8. *The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The “no action alternative” was discussed previously.*

| | | Major | Moderate | Minor | None | Unknown | Comments Included |
|----|---|-------|----------|-------|------|---------|-------------------|
| A. | Terrestrial and Aquatic Life and Habitats | | | X | | | yes |
| B. | Water Quality, Quantity, and Distribution | | | X | | | yes |
| C. | Geology and Soil Quality, Stability, and Moisture | | | X | | | yes |
| D. | Vegetation Cover, Quantity, and Quality | | | X | | | yes |
| E. | Aesthetics | | | X | | | yes |
| F. | Air Quality | | | X | | | yes |
| G. | Unique Endangered, Fragile, or Limited Environmental Resource | | | X | | | yes |
| H. | Demands on Environmental Resource of Water, Air, and Energy | | | X | | | yes |
| I. | Historical and Archaeological Sites | | | X | | | yes |
| J. | Cumulative and Secondary Impacts | | | X | | | yes |

Summary of Comments on Potential Physical and Biological Effects: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

Emissions from the diesel-powered generators/engines would have only minor impacts upon the terrestrial and aquatic life and habitats in areas where the generators/engines may operate. Although air pollutant deposition would occur in the areas where the generators/engines operate, the size and temporary nature of the operation, dispersion characteristics of pollutants, and conditions placed in Permit #3417-01 would result in minor impacts. In addition, the generators/engines would be relatively small and located at previously disturbed sites. Therefore, the operation of the generators/engines would present only minor impacts to the terrestrial and aquatic life and habitats in areas of potential operation.

B. Water Quality, Quantity, and Distribution

There would only be minor impacts on the water quality, quantity, and distribution because of the relatively small size and temporary nature of the operation. While deposition of pollutants would occur, the Department determined that any impacts from deposition of pollutants would be minor. As described in 7.F. of the EA, due to the conditions placed in Permit #3417-01 and the size a nature of the facility, the maximum impacts from the air emissions from this facility would be minor. Therefore, the diesel powered generators/engines would have only minor impacts to water quality, quantity, and distribution in the proposed area of operation.

C. Geology and Soil Quality, Stability, and Moisture

As a result of the operation of the portable diesel-powered generators/engines, there would be minor impacts to the geology and soil quality, stability, and moisture near the equipment's operational area because of the increased vehicle traffic and deposition of pollutants from portable generator operations. As explained in Section 7.F. of this EA, the facility's size, operational requirements, temporary nature of the operation, and conditions placed in Permit #3417-01 would minimize the impacts from deposition. In addition, the generators/engines would be relatively small in size and located at previously disturbed sites, which would also reduce the potential impact to the local geology and soil quality, stability, and moisture.

D. Vegetation Cover, Quantity, and Quality

Because small amounts of pollutant deposition would occur on the surrounding vegetation, there would be minor impacts on the local vegetative cover, quantity, and quality. The generators/engines would also be relatively small in size and located at previously disturbed sites. As explained in Section 7.F. of this EA, the Department determined that, as a result of the size and temporary nature of the operation and conditions placed in Permit #3417-01, any impacts on vegetative cover, quantity, and quality from the deposition of pollutants would be minor.

E. Aesthetics

The diesel-powered generators/engines would be visible and may create some additional noise in the area of operation. However, Permit #3417-01 would include conditions to limit emissions from the plant generator. The generators/engines would be relatively small and temporary and would be used to power the portable facility at previously disturbed sites. Therefore, any aesthetic impact to a given area would be minor and temporary.

F. Air Quality

The air quality emission impacts from the diesel-powered generators/engines would be minor because Permit #3417-01 would include conditions limiting the emissions from the equipment. In addition, the facility's potential emissions would be limited by Permit #3417-01 to less than 100 tons per year for any pollutant, resulting in the facility not requiring a Title V Operating Permit. Because of the size and temporary nature of the operation and conditions placed in Permit #3417-01, impacts from the deposition of pollutants would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to unique, endangered, fragile, or limited environmental resources in the initial proposed area of operation, contacted the Montana Natural Heritage Program (MNHP). Search results concluded there are four occurrences of one such environmental resource found within the defined area. The defined area, in this case, is defined by the township and range of the proposed site, with an additional one-mile buffer.

Centrocercus urophasianus (Greater Sage-grouse) is a species of concern in the area. Only minor and temporary effects to these species of concern would be expected from the proposed operation because pollutants would be dispersed before reaching this species. Also, this operation is located within the same area previously permitted and in an area previously used for aggregate crushing. Given the temporary and portable nature of the operations, any impacts would be minor and short-lived. Additionally, operational conditions and limitations within Permit #3417-01 would aid in the protection of these resources by protecting the surrounding environment.

H. Demands on Environmental Resources of Water, Air, and Energy

The operation of the generators/engines would require only small demands on water, air, and energy as a result of the relatively small size and temporary nature of the facility. While small amounts of water would be used for dust control on the surrounding roadways and job site, no water would be needed to operate the generator. Furthermore, as described in Section 7.F. of this EA, pollutant emissions generated from the facility would have minimal impacts on air quality in the immediate and surrounding area. The generators/engines would consume energy in the form of diesel fuel, a non-renewable resource. Overall, the equipment is relatively small and would have operational restrictions placed in Permit #3417-01. Because the facility operations would be seasonal and temporary, demands and impacts to the environmental resource of air and energy would be minor.

I. Historical and Archaeological Sites

The generators would typically operate within a previously disturbed open-cut pit. In consideration of correspondence from the Montana Historical Preservation Office, there would be a low likelihood of disturbance to any known archaeological or historical site given any previous industrial disturbance in a given area of operation. Therefore, the crushing operation would have only a minor impact on any historical or archaeological sites in a given area of operation.

J. Cumulative and Secondary Impacts

The diesel-powered generators/engines would cause minor impacts on the physical and biological environment because the generator would result in emissions of particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM10), nitrogen oxides (NOx), volatile organic compounds (VOC), carbon monoxide (CO), and sulfur oxides (SOx). Additional noise impacts from the generators/engines would also be minor. As a result of the temporary or seasonal nature of the facility and conditions and limitations contained within Permit #3417-01, impacts would be minimized. There is potential for other operations to locate at this site; however, any operations would have to apply for and receive the appropriate permits from the Department prior to operation. These permits would address the environmental impacts associated with the operations at the site.

9. *The following table summarizes the potential economic and social effects of the proposed project on the human environment. The “no action alternative” was discussed previously.*

| | | Major | Moderate | Minor | None | Unknown | Comments Included |
|----|---|-------|----------|-------|------|---------|-------------------|
| A. | Social Structures and Mores | | | | X | | yes |
| B. | Cultural Uniqueness and Diversity | | | | X | | yes |
| C. | Local and State Tax Base and Tax Revenue | | | X | | | yes |
| D. | Agricultural or Industrial Production | | | X | | | yes |
| E. | Human Health | | | X | | | yes |
| F. | Access to and Quality of Recreational and Wilderness Activities | | | X | | | yes |
| G. | Quantity and Distribution of Employment | | | | X | | yes |
| H. | Distribution of Population | | | | X | | yes |
| I. | Demands for Government Services | | | X | | | yes |
| J. | Industrial and Commercial Activity | | | X | | | yes |
| K. | Locally Adopted Environmental Plans and Goals | | | X | | | yes |
| L. | Cumulative and Secondary Impacts | | | X | | | yes |

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The Department has prepared the following comments.

A. Social Structures and Mores

The operation of the generators/engines would cause no disruption to the social structures and mores in the area because the source is a minor source of emissions (by industrial standards) and would only have intermittent operations. Additionally, the equipment would be expected to operate in an area previously designated and used for aggregate crushing. Further, the facility would be a minor source of air pollution and would be required to operate according to the conditions that would be placed in Permit #3417-01. In addition, the generators are being added to a facility already in operation. Therefore, no impacts are expected upon social structures or mores as a result.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of these areas would not be impacted by the proposed addition of generators/engines because these sites are expected to be previously designated and used for aggregate crushing. Additionally, the facility would be considered a portable/temporary source with seasonal and intermittent operations. Therefore, predominant use of the surrounding areas would not change as a result of this project.

C. Local and State Tax Base and Tax Revenue

The addition of generators/engines would have little, if any, impact on the local and state tax base and tax revenue because the facility is a relatively small industrial source (minor source) and would be used on a seasonal and intermittent basis. No additional full time or permanent employees are expected to be added as a result of issuing Permit 3417-01. Thus, only minor, if any, impacts to the local and state tax base and revenue could be expected. Furthermore, the impacts to local tax base and revenue would be minor because the source would also be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The generators/engines would be used at previously disturbed industrial areas; therefore, the Department does not expect that the permitted operation would impact or displace agricultural production. Furthermore, only minor impacts on any local industrial production would be expected because the operation of the facility (and generators/engines) would be temporary and would be relatively small in size.

E. Human Health

Permit #3417-01 would incorporate conditions to ensure that the generators/engines would operate in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. Therefore, only minor impacts would be expected upon human health from the proposed crushing/screening facility.

F. Access to and Quality of Recreational and Wilderness Activities

The generators/engines would typically operate within the confines of an existing open-cut pit. Therefore, only minor impacts upon the access to and quality of recreational and wilderness activities would result. Also, the facility would operate on a seasonal and intermittent basis and would be relatively small by industrial standards. Therefore, any changes in the quality of recreational and wilderness activities created by operating the equipment at a given site would be expected to be minor and intermittent.

G. Quantity and Distribution of Employment

As a result of the relatively small size and temporary nature of the operation, the quantity and distribution of employment in the area would not be impacted. No full time, permanent employees would be expected to be employed as a result of issuing Permit #3417-01 for the addition of the portable diesel generator.

H. Distribution of Population

No individuals would be expected to permanently relocate to a given area of operation as a result of Permit #3417-01. Also, the facility has only intermittent and seasonal operations. Therefore, the addition of generators/engines would not disrupt the normal population distribution in a given area of operation.

I. Demands of Government Services

Although minor increases would be observed in the local traffic on existing roads in the area where the facility operates, the operation of the diesel-powered generators/engines to the existing operations would not result in a need for new, altered, or additional government services.

J. Industrial and Commercial Activity

The operation of the generators/engines would represent only a minor increase in the industrial activity in any given area because of the small size and the portable and temporary nature of the facility; therefore, only minor additional industrial or commercial activity would result from the generator operations.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals that would affect Ken Griffith. The facility would be allowed, by permit, to operate in areas designated by EPA as attainment or unclassified. Permit #3417-01 would contain limits for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards. Because the facility would be a small and portable source, and would have intermittent and seasonal operations, any effects from the facility would be minor and short-lived.

L. Cumulative and Secondary Impacts

The operation would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate areas of operation because the source is a portable and temporary source. Minor increases in traffic would have minor effects on local traffic in the immediate areas, thus, having a direct effect on the social environment. Because the source is relatively small and temporary, only minor economic impacts to the local economy would be expected from operating the facility. Thus, only minor and temporary cumulative effects would result to the local economy.

Recommendation: An Environmental Impact Statement (EIS) is not required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: All potential effects resulting from operation of the proposed facility are minor; therefore, an EIS is not required.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Natural Heritage Program; and the State Historic Preservation Office (Montana Historical Society).

Individuals, or groups, contributing to this EA: Department of Environmental Quality (Air Resources Management Bureau), Montana State Historic Preservation Office (Montana Historical Society), and Montana Natural Heritage Program.

EA prepared by: Shawn Juers

Date: 3/18/2009